




Fleet Management Systems

BY ARADHIKA

Custom Object - Bus



All

Search Buses and more...

★

+

🏠

?

⚙️

🔔

👤

Fleet Management ...

Fleet Buses

Buses

Garages

Maintenance records

Buses

All

📌

NewImportChange OwnerPrintable View

30 items • Sorted by Maximum Capacity • Filtered by All buses • Updated a few seconds ago

Search this list...

⚙️














📊

🔄


✎

📅

🔍

	<input type="checkbox"/> Bus ...	Current Sta...	Maximu... ↓	Latest o...	Resale Value	Air conditio...	Sc...	Odom...	Bus Image	Loc...	Loc...	B...	Year	lo...
1	<input type="checkbox"/> Bus 34	Scheduled f...	60	12,345		<input checked="" type="checkbox"/>	<input type="checkbox"/>	12,345	https://media.istockphoto.c...	82.45	-5.77		2,001	
2	<input type="checkbox"/> Bus 2	Scheduled f...	60	10,000		<input checked="" type="checkbox"/>	<input type="checkbox"/>	10,000	https://media.istockphoto.c...	14.61	41.32		2,001	
3	<input type="checkbox"/> Bus 75	Scheduled f...	60	5,000		<input checked="" type="checkbox"/>	<input type="checkbox"/>	5,000	https://media.istockphoto.c...	55.21	24.70		2,001	
4	<input type="checkbox"/> Bus 4	Scheduled f...	60	5,000 		<input checked="" type="checkbox"/>	<input type="checkbox"/>	5,000	https://media.istockphoto.c...	77.75	31.22		2,001	
5	<input type="checkbox"/> Bus 37	Scheduled f...	60	5,000		<input checked="" type="checkbox"/>	<input type="checkbox"/>	5,000	https://media.istockphoto.c...	45.31	15.64		2,001	
6	<input type="checkbox"/> Bus 34	Scheduled f...	36			<input checked="" type="checkbox"/>	<input type="checkbox"/>	160,000	https://ichef.bbci.co.uk/ne...	66.01	-1.54		2,009	
7	<input type="checkbox"/> Bus 46	Ready For Use	36		\$158,800.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	160,000	https://ichef.bbci.co.uk/ne...	37.26	-7.65		2,009	
8	<input type="checkbox"/> Bus 46	Ready For Use	36		\$158,800.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	160,000	https://ichef.bbci.co.uk/ne...	2.16	20.89		2,009	
9	<input type="checkbox"/> Bus 38	Ready For Use	36		\$158,800.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	160,000	https://ichef.bbci.co.uk/ne...	21.22	80.20		2,009	
10	<input type="checkbox"/> Bus 59	Ready For Use	36		\$158,800.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	160,000	https://ichef.bbci.co.uk/ne...	42.74	28.45		2,009	
11	<input type="checkbox"/> Bus 16	Ready For Use	36		\$213,200.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	160,000	https://www.sustainable-bu...	21.11	19.07		1,972	
12	<input type="checkbox"/> Bus 1	Ready For Use	36		\$213,200.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	160,000	https://www.sustainable-bu...	10.26	17.08		1,972	

Custom Object - Garage



All ▾

★ ▾

+

?

Fleet Managment ...

Fleet Buses

Buses ▾

Garages ▾

Maintenance records ▾

Garages

All ▾


NewImportChange OwnerPrintable View

10 items • Sorted by Garage Name • Filtered by All garages • Updated a few seconds ago









⚙ ▾

▾

Custom Object - Maintenance records





All ▼









Fleet Managment ...

Fleet BusesBuses ▼Garages ▼Maintenance records ▼

Maintenance records

All ▼

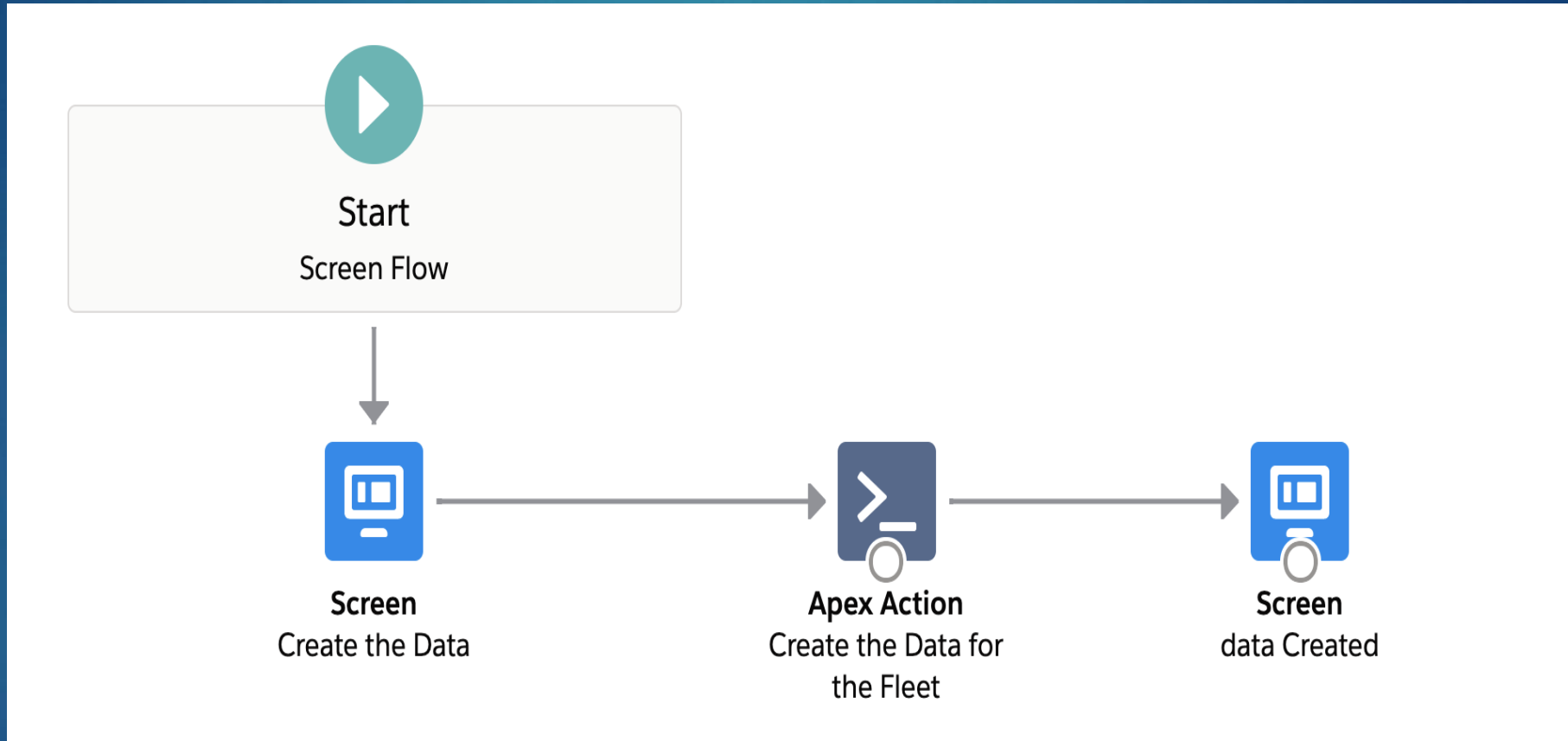
NewImportChange OwnerPrintable View



13 items • Sorted by Schedule Time • Filtered by All maintenance records • Updated a few seconds ago

<input type="checkbox"/>	Maintenance record Name ▼	Bus ▼	Garage ▼	Oil level ▼	Recorded odo... ▼	Schedule reason ▼	Schedule Time ↓
<input type="checkbox"/>	a025Y00000gAfc3	Bus 77	Garage 39		34,000	Every 5000 Miles Service	4/11/2021, 10:46 PM
<input type="checkbox"/>	a025Y00000gAfc2	Bus 9	Garage 95		15,000	Every 5000 Miles Service	4/11/2021, 10:46 PM
<input type="checkbox"/>	a025Y00000gAfRC	Bus 55	Garage 37		10,000	Every 5000 Miles Service	4/11/2021, 7:39 PM

Flow for the creation of data is provided and attached as utility bar




Flow for the creation of data is provided as utility bar shown below

The screenshot displays a Salesforce Lightning interface for a 'Buses' list. The top navigation bar includes 'Fleet Management ...', 'Fleet Buses', 'Buses', 'Garages', and 'Maintenance records'. The 'Buses' tab is active, showing a list of 50+ items. The list is sorted by 'Maximum Capacity' and filtered by 'All buses'. The table columns are: Bus Name, Current Status, Maximum Capacity, Latest odometer reading, Scheduled, Odometer Reading, and Bus Image. A callout box at the bottom left points to a utility bar with the text 'Click here to Setup the Bus data!'.








	Bus Name	Current Status	Maximum C...	Latest odomete...	Sched...	Odometer Reading	Bus Image
1	Bus 55	Ready For Use	60	10,000	<input type="checkbox"/>	10,000	https://media.is...
2	Bus 9	Scheduled for...	60	15,000	<input type="checkbox"/>	15,000	https://media.is...
3	Bus 77	Scheduled for...	60	34,000	<input type="checkbox"/>	34,000	https://media.is...
4	Bus 6	Ready For Use	60	5,000	<input type="checkbox"/>	5,000	https://media.is...
5	Bus 31	Ready For Use	60	5,000	<input type="checkbox"/>	5,000	https://media.is...
6	Bus 63	Ready For Use	60	5,000	<input type="checkbox"/>	5,000	https://media.is...
7	Bus 87	Scheduled for...	60	5,000	<input type="checkbox"/>	5,000	https://media.is...
8	Bus 68	Scheduled for...	60	5,000	<input type="checkbox"/>	5,000	https://media.is...

Click here to Setup the Bus data!

Resale values calculated as soon as data created or edited for bus by trigger for bus with 24 and 36 seat with current status 'Ready for use'



All ▾




Fleet Managment ...

Fleet Buses


Buses ▾

Garages ▾

Maintenance records ▾







 Buses














All ▾



NewImportChange OwnerPrintable View

30 items • Sorted by Maximum Capacity • Filtered by All buses • Updated a few seconds ago



	<input type="checkbox"/> Bus ... ▾	Current Sta... ▾	Maximu... ▾	Latest o... ▾	Resale Value ▾	Air conditio... ▾	Sc... ▾	Odom... ▾	Bus Image ▾	Loc... ▾	Loc... ▾	B... ▾	Year ▾	lo...
1	<input type="checkbox"/> Bus 34	Scheduled f...	60	12,345		<input checked="" type="checkbox"/>	<input type="checkbox"/>	12,345	https://media.istockphoto.c...	82.45	-5.77		2,001	
2	<input type="checkbox"/> Bus 2	Scheduled f...	60	10,000		<input checked="" type="checkbox"/>	<input type="checkbox"/>	10,000	https://media.istockphoto.c...	14.61	41.32		2,001	
3	<input type="checkbox"/> Bus 75	Scheduled f...	60	5,000		<input checked="" type="checkbox"/>	<input type="checkbox"/>	5,000	https://media.istockphoto.c...	55.21	24.70		2,001	
4	<input type="checkbox"/> Bus 4	Scheduled f...	60	5,000 		<input checked="" type="checkbox"/>	<input type="checkbox"/>	5,000	https://media.istockphoto.c...	77.75	31.22		2,001	
5	<input type="checkbox"/> Bus 37	Scheduled f...	60	5,000		<input checked="" type="checkbox"/>	<input type="checkbox"/>	5,000	https://media.istockphoto.c...	45.31	15.64		2,001	
6	<input type="checkbox"/> Bus 34	Scheduled f...	36			<input checked="" type="checkbox"/>	<input type="checkbox"/>	160,000	https://ichef.bbci.co.uk/ne...	66.01	-1.54		2,009	
7	<input type="checkbox"/> Bus 46	Ready For Use	36		\$158,800.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	160,000	https://ichef.bbci.co.uk/ne...	37.26	-7.65		2,009	
8	<input type="checkbox"/> Bus 46	Ready For Use	36		\$158,800.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	160,000	https://ichef.bbci.co.uk/ne...	2.16	20.89		2,009	
9	<input type="checkbox"/> Bus 38	Ready For Use	36		\$158,800.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	160,000	https://ichef.bbci.co.uk/ne...	21.22	80.20		2,009	
10	<input type="checkbox"/> Bus 59	Ready For Use	36		\$158,800.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	160,000	https://ichef.bbci.co.uk/ne...	42.74	28.45		2,009	
11	<input type="checkbox"/> Bus 16	Ready For Use	36		\$213,200.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	160,000	https://www.sustainable-bu...	21.11	19.07		1,972	
12	<input type="checkbox"/> Bus 1	Ready For Use	36		\$213,200.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	160,000	https://www.sustainable-bu...	10.26	17.08		1,972	

Buses ready to be scheduled for maintenance every 5000 miles, formula field schedule bus for service will be checked will be picked up by the batch file

Fleet Management ... Fleet Buses Buses Garages Maintenance records

Buses All


New Import Change Owner Printable View

50+ items • Sorted by Maximum Capacity • Filtered by All buses • Updated a few seconds ago








Search this list...

	Bus Name	Current Status	Maximum C...	Latest odomete...	Sched...	Odometer Reading	Bus Image
6	<input type="checkbox"/> Bus 31	Ready For Use	60	5,000	<input type="checkbox"/>	5,000	https://media.is...
7	<input type="checkbox"/> Bus 6	Ready For Use	60	5,000	<input type="checkbox"/>	5,000	https://media.is...
8	<input type="checkbox"/> Bus 77	Ready For Use	60	5,000	<input checked="" type="checkbox"/>	34,000	https://media.is...
9	<input type="checkbox"/> Bus 9	Ready For Use	60	5,000	<input checked="" type="checkbox"/>	15,000	https://media.is...
10	<input type="checkbox"/> Bus 55	Ready For Use	60	10,000	<input type="checkbox"/>	10,000	https://media.is...
11	<input type="checkbox"/> Bus 87	Ready For Use	36		<input type="checkbox"/>	160,000	https://www.su...
12	<input type="checkbox"/> Bus 34	Ready For Use	36		<input type="checkbox"/>	160,000	https://www.su...
13	<input type="checkbox"/> Bus 13	Ready For Use	36		<input type="checkbox"/>	160,000	https://www.su...

Maintenance records got created when Batch program ran or scheduled.





All ▾









Fleet Managment ...

Fleet BusesBuses ▾Garages ▾Maintenance records ▾

Maintenance records

All ▾

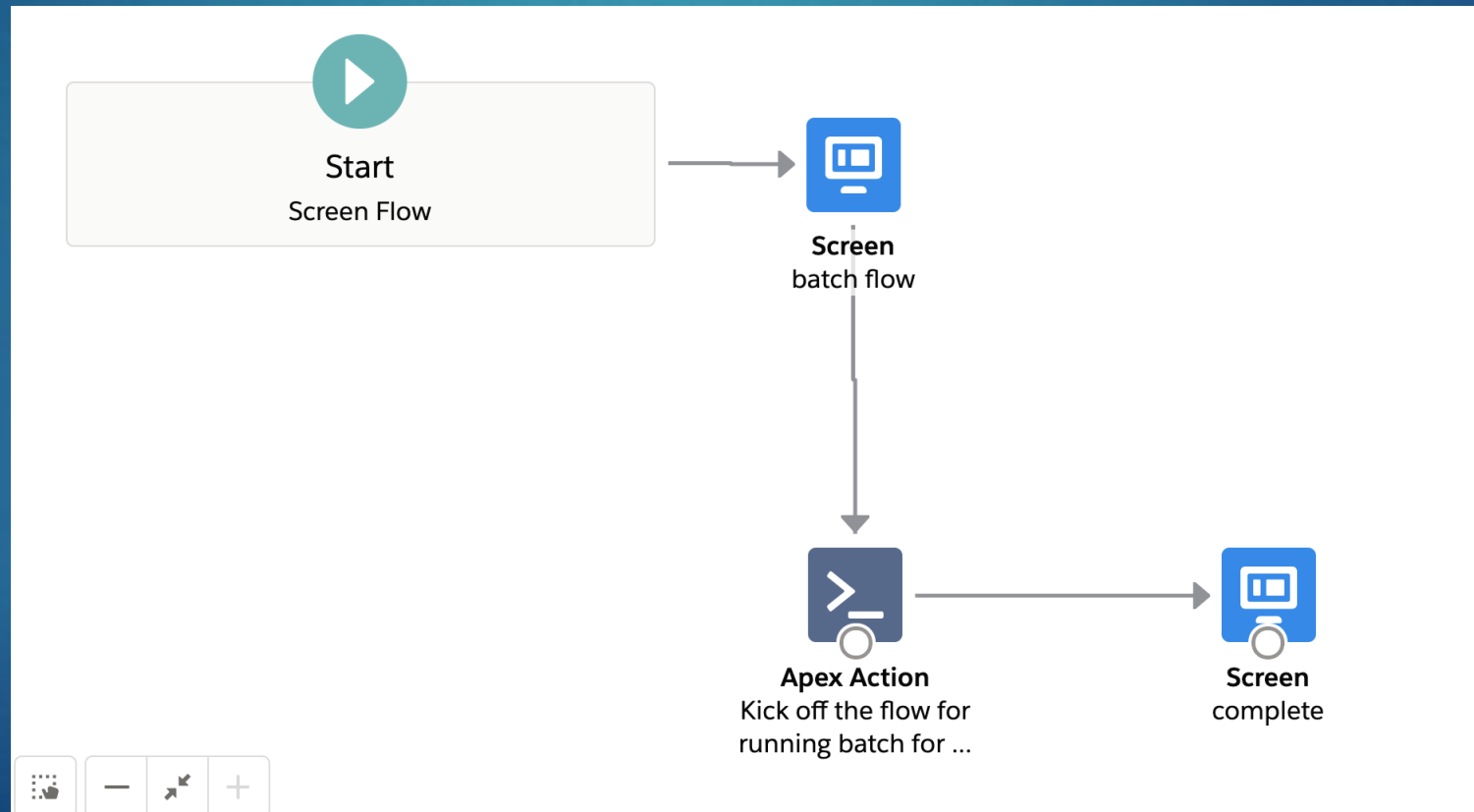
NewImportChange OwnerPrintable View



13 items • Sorted by Schedule Time • Filtered by All maintenance records • Updated a few seconds ago

<input type="checkbox"/>	Maintenance record Name ▾	Bus ▾	Garage ▾	Oil level ▾	Recorded odo... ▾	Schedule reason ▾	Schedule Time ↓
<input type="checkbox"/>	a025Y00000gAfc3	Bus 77	Garage 39		34,000	Every 5000 Miles Service	4/11/2021, 10:46 PM
<input type="checkbox"/>	a025Y00000gAfc2	Bus 9	Garage 95		15,000	Every 5000 Miles Service	4/11/2021, 10:46 PM
<input type="checkbox"/>	a025Y00000gAfRC	Bus 55	Garage 37		10,000	Every 5000 Miles Service	4/11/2021, 7:39 PM

One another flow is placed on the main App page to kick off the batch file manually for creating maintenance records for 60 seater buses for every 5000miles



Batch file flow is added on App Page

The screenshot displays the 'Fleet Management' application interface. At the top, there is a navigation bar with a search bar and several utility icons. Below the navigation bar, a tabbed interface shows 'Fleet Buses' as the active tab, with other tabs for 'Buses', 'Garages', and 'Maintenance records'. The main area features a grid of 12 bus cards, each with a bus icon and a label (e.g., 'Bus 73', 'Bus 63', 'Bus 87', 'Bus 68', 'Bus 39', 'Bus 54', 'Bus 75', 'Bus 12', 'Bus 71', 'Bus 45', 'Bus 92', 'Bus 14'). To the right of the grid is a sidebar with configuration options: 'Maximum Capacity' (set to '--None--'), 'Odometer Reading' (empty input field), 'Cancel' and 'Save' buttons, 'Resale Value:' (text), and a section titled '60 seater Bus maintenance' with a 'Next' button. A footer message at the bottom left says 'Click here to Setup the Bus data!'.

Cloud icon

All Search...

★ + 🔔 ? ⚙️ 🔔 👤

Fleet Management ... Fleet Buses Buses Garages Maintenance records

Bus 73 Bus 63 Bus 87 Bus 68

Bus 39 Bus 54 Bus 75 Bus 12

Bus 71 Bus 45 Bus 92 Bus 14

Maximum Capacity
--None--

Odometer Reading

Cancel Save

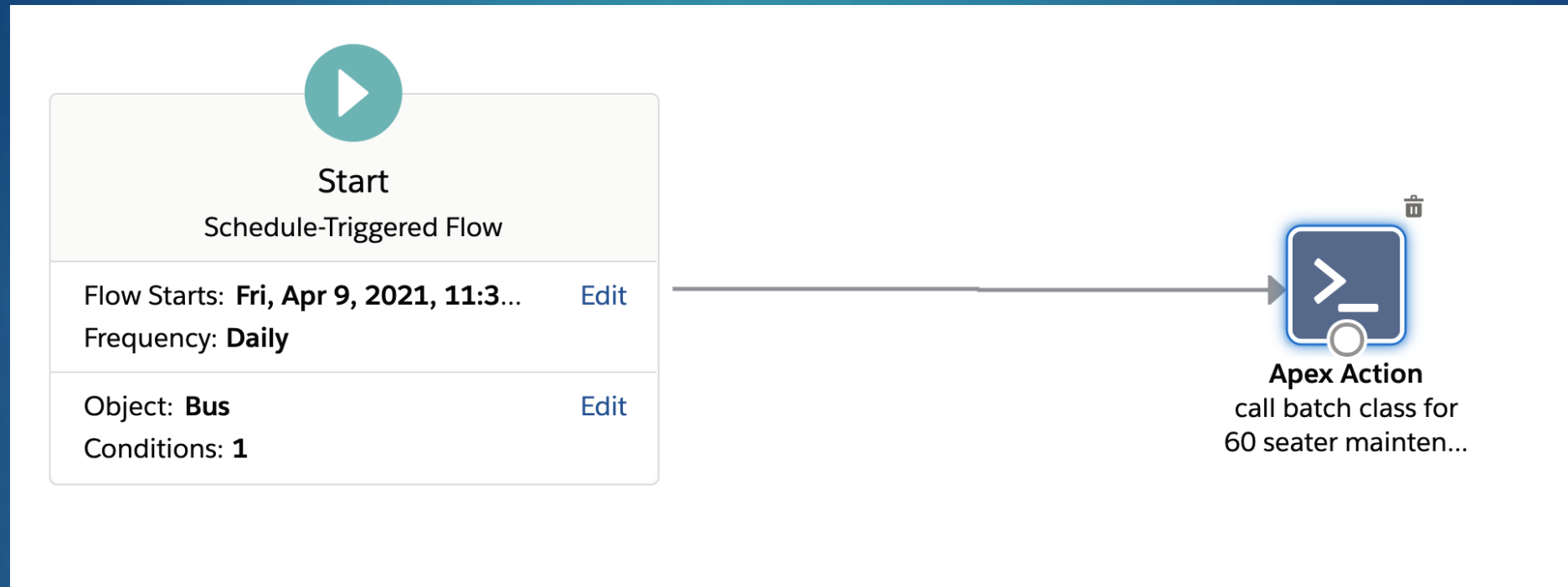
Resale Value:

60 seater Bus maintenance
Click next to kick off the flow for maintenance record for 60 seater buses

Next

⚡ Click here to Setup the Bus data!

A Schedule flow is created to schedule maintenance every 5000 miles for 60 seater buses




All Scheduled Jobs [Help for this Page](#)

The All Scheduled Jobs page lists all of the jobs scheduled by your users. Multiple job types may display on this page. You can delete scheduled jobs if you have the permission to do so.

View: [All Scheduled Jobs](#) [Create New View](#)

Action	Job Name	Submitted By	Submitted	Started	Next Scheduled Run	Type
Del	Schedule_flow_for_nightly_job-6	Chawla, Aradhika	4/11/2021, 11:07 PM	4/11/2021, 11:30 PM	4/12/2021, 11:30 PM	Scheduled Flow


Fleet Bus Page with LWCs




All ▾


★ ▾


+




?








 Fleet Managment ...


Fleet Buses


Buses ▾


Garages ▾


Maintenance records ▾





 Fleet Buses


 Bus 78





 Bus 61





 Bus 88





 Bus 65





 Bus 58





 Bus 4



 Bus 71




 78



Bus Details


Bus Name

Bus 65




Year

2,345




Maximum Capacity

24



Odometer Reading

45,676





Fleet Buses



Bus 78



Bus 61



Bus 88



Bus 65



Bus 58



Bus 4



Bus 71



78



Bus Details

Bus Name

Bus 65



Year

2,345



Maximum Capacity

24



Odometer Reading

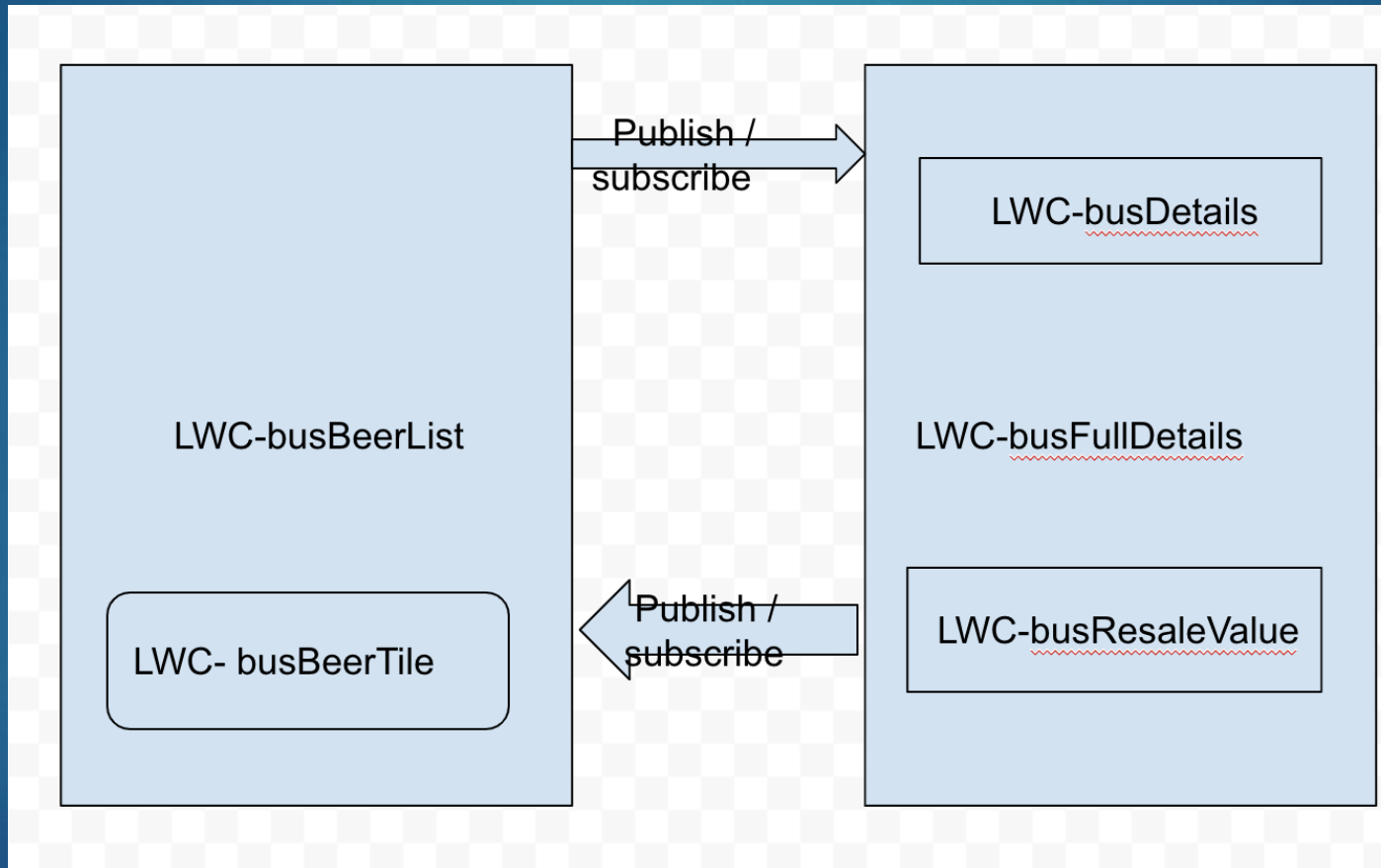
45,676



Resale Value:

\$3,600.00

LWC layout and Lightning message service

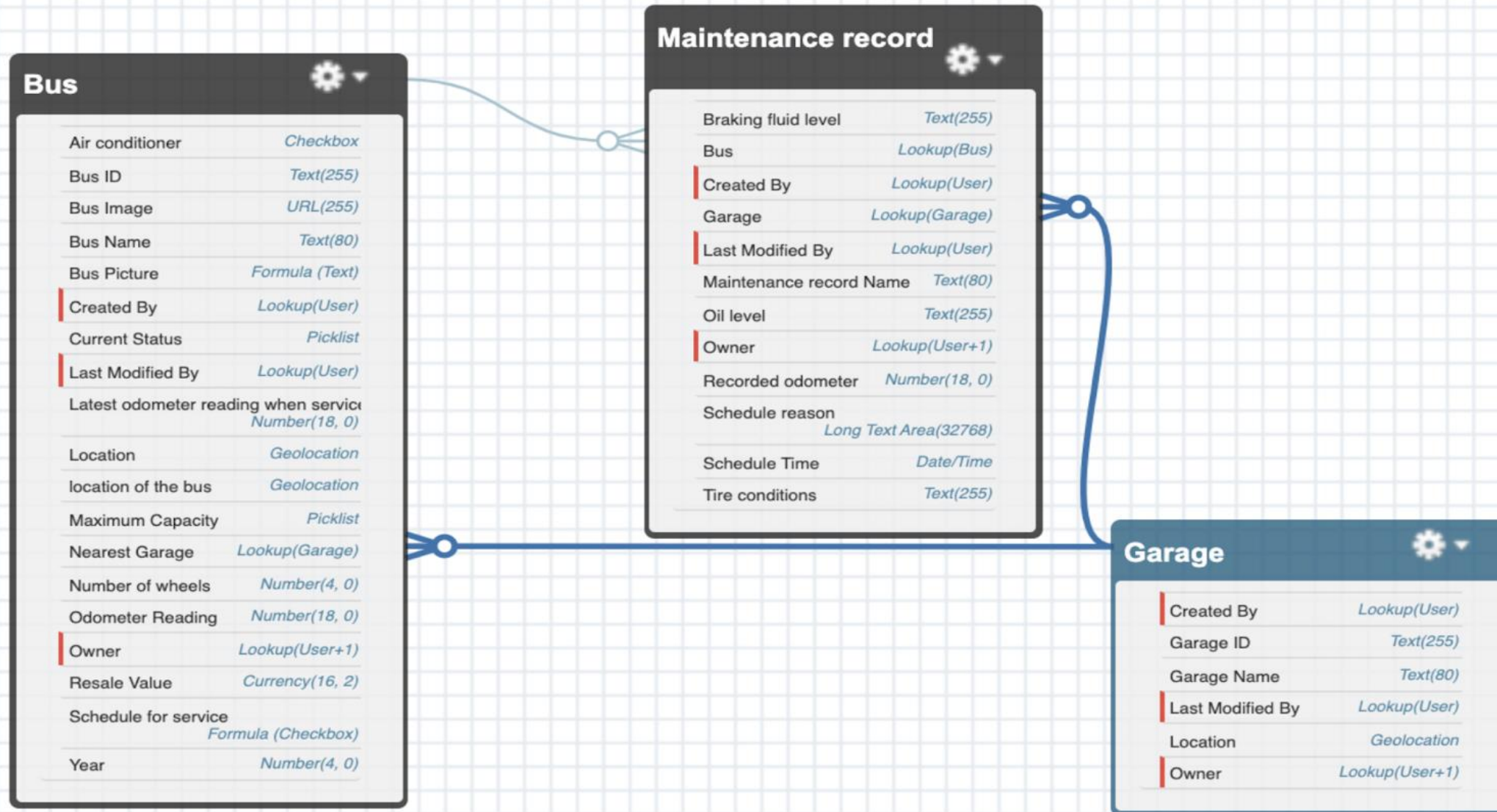


Steps to Install the app, Fleet Management system into a Developer Edition Org or a Trailhead Playground

1. `git clone https://github.com/aradhikachawla/FleetManagement`
2. `cd FleetManagement`
3. `sfdx auth:web:login -s -a mydevorg`
4. `sfdx force:source:deploy -p force-app`
5. `sfdx force:user:permset:assign -n FleetManagement`
6. Open the org and select the app 'Fleet Management system' from App Launcher
7. Click on Fleet buses
8. Click on bottom 'Click here to setup the Bus Data' to setup some data and refresh the page
9. Data should be displayed on Fleet Buses page, when clicked on any bus tile, details should appear on right side and you should be able to save the record and edits should reflect on the left side Buses List

- ▶ ER Diagram (included below in Presentation)
- ▶ Apex Trigger
 - ▶ CalculateResaleValue
 - ▶ CalculateResaleValueHelper
 - ▶ CalculateResaleValueTest
- ▶ App 'Fleet Management Systems'
 - ▶ Lightning Page - Fleet Buses
 - ▶ LWC - busBeerList, BusBeerTile, busFullDetail, busDetail, busResaleTile
 - ▶ Apex Class -LWCController
- ▶ Batch File / Schedulable file
 - ▶ BatchClassForMaintenanceNew
 - ▶ BatchMainClassNew
 - ▶ MaintenanceSchedulableClass
 - ▶ MaintenanceSchedulableClassTest
 - ▶ Flow - Schedule flow for nightly job
 - ▶ Flow - 60 seater Bus maintenance
- ▶ Note : Data Creation flow has been created for Bus and Garage and added - Flow - Create the Data.

Question 1- ER Diagram



Few Test classes are also made

- ▶ CalculateResaleValueTest
- ▶ MaintenanceSchedulableClassTest
- ▶ BatchClassForMaintenanceNewTest